

### Amendment to the Specification

The paragraph starting at page 3, line 7 and ending at line 19 has been amended as follows.

On the other hand, the document described with the structured description language, not requiring a particular application as explained in the foregoing, can be printed in a terminal not containing the application if the printing apparatus can interpret the structured description language. As the printing apparatus can acquire the document data and execute printing thereof, by instructing the storage location of the document data even from an external device such as a portable information terminal or a mobile telephone, ~~whereby~~ the printing of the document on the web server is rendered possible. In the following description, such print instruction will be called “reference print instruction”.

The paragraph starting at page 4, line 4 and ending at line 12 has been amended as follows.

However, in case of executing the aforementioned reference print instruction in a print system in which the formatting process is executed in a web server (also including other servers), the server cannot know the size of the physical page or the layout direction thereof at the formatting operation. For this reason there results a

drawback that the server can only execute layout on the logic page but cannot achieve layout of satisfactory ~~looking~~ appearance, matching the actual output sheet size.

The paragraph starting at page 6, line 18 and ending at line 26 has been amended as follows.

In the LBP shown in Fig. 1, there can be registered a character pattern or a fixed document format (form data) from an unrepresented data source. Referring to Fig. 1, a main body 1000 of the LBP can receive and store character information (character code), form information, macro instruction, etc. supplied from an externally connected host computer, can also ~~prepares~~ prepare a character pattern or a form pattern corresponding to such information and ~~forms~~ can form an image on a recording sheet constituting a recording medium.

The paragraph starting at page 15, line 23 and ending at page 16, line 4 has been amended as follows.

For example, in the third line, to a tag <title> is attached character train data “Sample”. This tag means that the character train “Sample” is a “title”, but does not include the information indicating the size and the layout position of such character train. The manner of layout of the document is determined by a file generally called style sheet

and describing the layout information. In the document shown in Fig. 6, the first line designates the style sheet to be applied.

The paragraph starting at page 20, line 23 and ending at page 21, line 2 has been amended as follows.

In this manner the printer 1000 may determine the physical layout information by itself according to the function or status of the printer 1000 and ~~transmits~~ transmit such physical layout information to the server, whereby appropriate printing can be executed even in case the user cannot designate or forgets to designate the physical layout information.

The paragraph starting at page 21, line 13 and ending at line 15 has been amended as follows.

Then a step S803 acquires the resources necessary for layout. For example, the style sheet shown in Fig. 7 corresponds to such necessary resources.

The paragraph starting at page 22, line 1 and ending at line 4 has been amended as follows.

When a step S805 detects the end of the process, the sequence proceeds to a step S806 for transmitting the document data after the physical page layout process, utilizing the HTTP protocol, whereby ~~all~~ the process is terminated.

The paragraph starting at page 22, line 26 and ending at page 23, line 6 has been amended as follows.

Then a step S1503 detects the physical layout information informed by the HTTP protocol and then a step S1504 executes the physical page layout process. Thus the formatting process is executed only based on the information obtained in the steps S1502 and S1503. After the process of the step S1504, a step S1505 transmits, by the HTTP protocol, the document data after physical page layout whereby ~~all~~ the process is terminated.

The paragraph starting at page 24, line 17 and ending at line 21 has been amended as follows.

After the process up to the step S1707, a step S1708 transmits the extracted document data by the HTTP protocol. Finally, a step S1709 deletes the document data temporarily stored in the memory, whereby ~~all~~ the process is terminated.

The paragraph starting at page 24, line 27 and ending at page 25, line 8 has been amended as follows.

In the foregoing embodiment there has been explained an example in which the instruction data indicating the reference print instruction are described with the structured description language, but such instruction data need not necessarily be described in the structured description language as long as such data instruct the output of the document data in the structured description language. For example, instruction is also possible with the HTTP protocol only.

The paragraph starting at page 25, line 23 and ending at page 26, line 4 has been amended as follows.

Also in the foregoing embodiments there is informed the information relating to the physical page layout among the information instructed in the reference print instruction, but it is also possible to inform information not instructed in the reference print instruction if such information is to be referred to at the layout operation. For example, the resolution specific to the printing apparatus may be informed to execute a more rigorous physical page layout.

The paragraphs starting at page 29, line 7 and ending at page 30, line 7 have been amended as follows.

Furthermore, by providing a server for converting the document data into document data described in the structured description language capable of layout into the physical page, the server, upon receiving the URI and the physical layout information from the printing apparatus, can acquire the designated document, execute the formatting process based on the physical layout information and ~~providing~~ provide the printing apparatus with the generated document data, whereby a high-quality, efficient print system of load dispersion type can be realized. Therefore, the printing apparatus, even if lacking ~~the~~ a highly advanced function such as a formatting process, can print the document data described with the structured description language lacking the page concept.

Also the printing apparatus can change the physical layout information instructed from the user according to the function or status of the printing apparatus and ~~transmits~~ can transmit such information to the server, whereby the appropriate printing can be achieved without requiring the user to check the function or status of the printing apparatus.

Also the printing apparatus can determine the physical layout information according to the function or status of the printing apparatus and ~~transmits~~ can transmit such information to the server, whereby the appropriate printing can be achieved even in case the user cannot designate or forgets to designate the physical layout information.

Amendments to the Abstract of the Disclosure

Please amend the Abstract of the Disclosure to read as follows.

The invention provides a high-quality, efficient print system of load diffusion type, capable of printing document data described with a structured description language based on page concept. A printing apparatus transmits, to a server, information for identifying the document data and physical layout information required for determining the layout of the document data, and the server converts the document data into document data described with the structured description language capable of page layout based on the received information.

### Amendments to the Claims

Please cancel Claims 32-34 without prejudice or disclaimer of the subject matter recited therein.

Please amend 1, 2, 4-8, 10-18, 20-24, 26-31 and 35-37 and add Claims 38-43 as follows.

1. (Currently Amended) An image forming apparatus capable of outputting an image on a recording medium, ~~based on data described with a structured description language~~, comprising:

~~informing means for informing~~ a sending unit adapted to send, to an external apparatus, acquisition information for acquiring data and layout information necessary for assigning an image based on the data to the recording medium so as to cause the external apparatus to acquire the data in accordance with the sent acquisition information and generate data for output based on the acquired data and the sent layout information; and

an acquisition means for acquiring unit adapted to acquire the data outputted from said for output generated by the external apparatus ~~according to the information by said informing means~~.

2. (Currently Amended) An image forming apparatus according to claim 1, wherein the acquisition information for acquiring the data is information for identifying the data.



3. (Original) An image forming apparatus according to claim 2, wherein the information for identifying the data is represented by URI.
4. (Currently Amended) An image forming apparatus according to claim 1, further comprising:  
  
a reception ~~means for receiving~~ unit adapted to receive a print instruction including the acquisition information indicating the position of storage of data and ~~said the~~ layout information[[:]],  
  
wherein said ~~informing means informs~~ sending unit sends to the external apparatus the acquisition information and the layout information included in ~~said the~~ print instruction received by said reception unit.
5. (Currently Amended) An image forming apparatus according to claim 1, wherein said acquisition ~~means~~ unit acquires the data for output through a network.
6. (Currently Amended) An image forming apparatus according to claim 1, wherein ~~said the~~ layout information includes information indicating the sheet size or the layout direction.

7. (Currently Amended) An image forming apparatus according to claim 1, wherein ~~said~~ the layout information is information designating a page and said acquisition ~~means~~ unit acquires the data for output corresponding to the designated page.

8. (Currently Amended) An image forming apparatus according to claim ~~1~~ 38, wherein ~~said~~ the structured description language is XML or HTML.

9. (Original) An image forming apparatus according to claim 1, wherein said apparatus is a printing apparatus.

10. (Currently Amended) An image forming system ~~composed~~ comprised of an image forming apparatus capable of outputting an image on a recording medium ~~based on data described in a structured description language~~ and an external apparatus for executing a conversion process of ~~the~~ data described with ~~said~~ a structured description language, the system comprising:

~~informing means for informing a sending unit, provided in said image forming apparatus, adapted to send, to an~~ said external apparatus, acquisition information for acquiring data and layout information necessary for assigning an image based on the data to the recording medium;

~~an acquisition means for acquiring unit, provided in said external apparatus, adapted to acquire the data based on the acquisition information for acquiring data sent by~~ said sending unit;

~~a conversion means for converting unit, provided in said external apparatus,~~  
~~adapted to convert the data acquired data by said acquisition unit based on said the layout~~  
~~information sent by said sending unit;~~

~~a transfer means for transferring unit, provided in said external apparatus,~~  
~~adapted to transfer the data converted data by said conversion unit from said external~~  
~~apparatus to said image forming apparatus; and~~

~~an output means for outputting unit, provided in said image forming~~  
~~apparatus, adapted to output an image by analyzing the data transferred data by said~~  
~~transfer unit.~~

11. (Currently Amended) An image forming apparatus capable of  
outputting an image on a recording medium ~~based on data described with a structured~~  
~~description language~~, comprising:

~~a reception means for receiving a print instruction including unit adapted to~~  
~~receive layout information required for assigning an image based on the data to the~~  
~~recording medium;~~

~~a changing means for changing unit adapted to change the layout~~  
~~information received by said reception means unit;~~

~~informing means for informing a sending unit adapted to send, to an~~  
~~external apparatus, the layout information changed by said changing means unit so as to~~  
~~cause the external apparatus to generate data for output based on the sent layout~~  
~~information; and~~

~~an acquisition means for acquiring~~ unit adapted to acquire the data outputted from said ~~for output generated by the~~ external apparatus ~~in response to the information by~~ ~~said informing means.~~

12. (Currently Amended) An image forming apparatus according to claim 11, wherein said changing ~~means~~ unit changes ~~said~~ the layout information according to the function or status of said image forming apparatus.

13. (Currently Amended) An image forming apparatus according to claim 11, wherein ~~said~~ the layout information is information indicating the sheet size.

14. (Currently Amended) An image forming apparatus capable of outputting an image on a recording medium ~~based on data described with a structured description language~~, comprising:

~~a reception means for receiving~~ unit adapted to receive a print instruction;

~~a determination means for determining~~ unit adapted to determine layout information required for assigning an image based on ~~the~~ data to the recording medium, ~~in case if~~ the received print instruction does not include ~~said~~ any layout information for the data;

~~informing means for informing~~ a sending unit adapted to send, to an external apparatus, the layout information determined by said determination ~~means~~ unit so

as to cause the external apparatus to generate data for output based on the sent layout information; and

an acquisition means for acquiring unit adapted to acquire the data outputted from said for output generated by the external apparatus in response to the information by said informing means.

15. (Currently Amended) An image forming apparatus according to claim 14, wherein said determination ~~means~~ unit determines ~~said the~~ layout information according to the function or status of said image forming apparatus.

16. (Currently Amended) An image forming apparatus according to claim 14, wherein ~~said the~~ layout information is information indicating the sheet size.

17. (Currently Amended) An image forming method for outputting an image on a recording medium ~~based on data described with a structured description language~~, comprising steps of:

informing sending, to an external apparatus, acquisition information for acquiring data and layout information necessary for assigning an image based on the data to the recording medium so as to cause the external apparatus to acquire the data in accordance with the sent acquisition information and generate data for output based on the acquired data and the sent layout information; and

acquiring data ~~outputted from said~~ for output generated by the external apparatus according to the information by said informing step.

18. (Currently Amended) An image forming method according to claim 17, wherein the acquisition information for acquiring the data is information for identifying the data.

19. (Original) An image forming method according to claim 18, wherein the information for identifying the data is represented by URI.

20. (Currently Amended) An image forming method according to claim 17, further comprising steps of:

receiving a print instruction including the acquisition information indicating the position of storage of data and ~~said~~ the layout information; and

~~informing~~ sending to the external apparatus the acquisition information and the layout information included in ~~said~~ the print instruction received in said receiving step.

21. (Currently Amended) An image forming method according to claim 17, wherein the data for output are acquired through a network.

22. (Currently Amended) An image forming method according to claim 17, wherein ~~said~~ the layout information includes information indicating the sheet size or the layout direction.

23. (Currently Amended) An image forming method according to claim 17, wherein ~~said~~ the layout information is information designating a page and there are acquired the data for output corresponding to the designated page.

24. (Currently Amended) An image forming method according to claim ~~17~~ 41, wherein ~~said~~ the structured description language is XML or HTML.

25. (Original) An image forming method according to claim 17, wherein said method is realized in a printing apparatus.

26. (Currently Amended) An image forming method for outputting an image on a recording medium ~~based on data described with a structured description language~~, comprising steps of:

receiving ~~a print instruction including~~ layout information required for assigning an image based on ~~the~~ data to the recording medium;

changing the received layout information;

~~informing sending~~, to an external apparatus, the changed layout information so as to cause the external apparatus to generate data for output based on the sent layout information; and

acquiring ~~the data outputted from said~~ for output generated by the external apparatus ~~in response to the information by said informing step.~~

27. (Currently Amended) An image forming method according to claim 26, wherein ~~said~~ the layout information is changed according to the function or status of ~~said~~ an image forming apparatus.

28. (Currently Amended) An image forming method according to claim 26, wherein ~~said~~ the layout information is information indicating the sheet size.

29. (Currently Amended) An image forming method for outputting an image on a recording medium ~~based on data described with a structured description language~~, comprising steps of:

receiving a print instruction;

determining layout information required for assigning an image based on ~~the~~ data to the recording medium, ~~in case if~~ the received print instruction does not include ~~said~~ any layout information for the data;



~~informing~~ sending, to an external apparatus, the determined layout information so as to cause the external apparatus to generate data for output based on the sent layout information; and

acquiring the data ~~outputted from said~~ for output generated by the external apparatus ~~in response to the information by said informing step~~.

30. (Currently Amended) An image forming method according to claim 29, wherein ~~said~~ the layout information is determined according to the function or status of ~~said~~ an image forming apparatus.

31. (Currently Amended) An image forming method according to claim 29, wherein ~~said~~ the layout information is information indicating the sheet size.

Claims 32-34 (Canceled).

35. (Currently Amended) A program to be executed by an image forming apparatus capable of outputting an image on a recording medium ~~based on data described with a structured description language~~, the program comprising:

~~an informing step of informing~~ sending, to an external apparatus, acquisition information for acquiring data and layout information necessary for assigning an image based on the data to the recording medium so as to cause the external apparatus

to acquire the data in accordance with the sent acquisition information and generate data for output based on the acquired data and the sent layout information; and

an acquisition step of acquiring data ~~outputted from said~~ for output generated by the external apparatus ~~according to the information by said informing step.~~

36. (Currently Amended) A program to be executed by an image forming apparatus capable of outputting an image on a recording medium ~~based on data described with a structured description language~~, the program comprising:

a reception step of receiving a ~~print instruction including~~ layout information required for assigning an image based on ~~the~~ data to the recording medium;

a changing step of changing the layout information received by said reception step;

~~an informing~~ a sending step of ~~informing~~ sending, to an external apparatus, the layout information changed by said changing step so as to cause the external apparatus to generate data for output based on the sent layout information; and

an acquisition step of acquiring data ~~outputted from said~~ for output generated by the external apparatus ~~in response to the information by said informing step.~~

37. (Currently Amended) A program to be executed by an image forming apparatus capable of outputting an image on a recording medium ~~based on data described with a structured description language~~, the program comprising:

a reception step of receiving a print instruction;

a determination step of determining layout information required for assigning an image based on ~~the~~ data to the recording medium, ~~in case~~ if the received print instruction does not include ~~said~~ any layout information for the data ;

~~an informing a sending~~ step of ~~informing~~ sending, to an external apparatus, the layout information determined by said determination step so as to cause the external apparatus to generate data for output based on the sent layout information; and

an acquisition step of acquiring the data outputted from said for output generated by the external apparatus ~~in response to the information by said informing step~~.

38. (New) An image forming apparatus according to Claim 1, wherein the data acquired in accordance with the acquisition information is described with a structured description language.

39. (New) An image forming apparatus according to Claim 11, wherein the external apparatus generates the data for output based on data described with a structured description language and the sent layout information.

40. (New) An image forming apparatus according to Claim 14, wherein the external apparatus generates the data for output based on data described with a structured description language and the sent layout information.

41. (New) An image forming method according to Claim 17, wherein the data acquired in accordance with the acquisition information is described with a structured description language.

42. (New) An image forming method according to Claim 26, wherein the external apparatus generates the data for output based on data described with a structured description language and the sent layout information.

43. (New) An image forming method according to Claim 29, wherein the external apparatus generates the data for output based on data described with a structured description language and the sent layout information.